169801

Access DB# _____

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Robert (Peter) Shiao Examiner #: 79521 Date: 10/28/05

Art Unit: 1626 Phone Number 30 07071 Serial Number: 10/748,342

Mail Box and Bldg/Room Location: REM 5A10, 5C18 Results Format Preferred (circle): PAPER DISK E-MAIL:

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

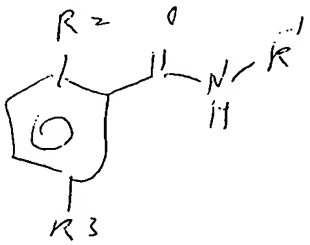
Title of Invention: Benzamide Inhibitor

Inventors (please provide full names): Dombrowski et al

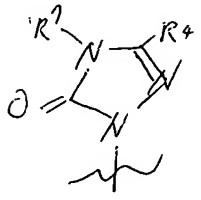
Earliest Priority Filing Date: _____

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

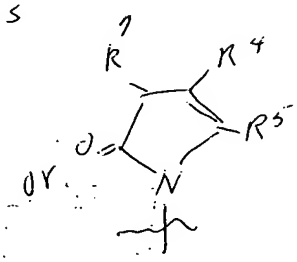
I search cpd I. (see claim 1, or 2) * R^1, R^2 are sub



* R^3 is



or



II search cpds of claim 10. R^4, R^5, R^7 are sub.

III method of use of cpd I

STAFF USE ONLY

Searcher: _____

Searcher Phone #: 37504

Type of Search

NA Sequence (#)_____

AA Sequence (#)_____

Vendors and cost where applicable

STN ✓

Dialog _____

STIC Search Report
Biotech-Chem Library

STIC Database Tracking Number: 169801

TO: Rei-Tsang Shiao Location: 5a10 / 5c18 Monday, October 31, 2005 Art Unit: 1626 Phone: 571-272-0707 Serial Number: 10 / 748342	From: Jan Delaval Location: Biotech-Chem Library Remsen 1a51 Phone: 571-272-2504 jan.delaval@uspto.gov

Search Notes

STIC SEARCH RESULTS FEEDBACK FORM

USPTO

Biotech-Chem Library

Questions about the scope or the results of the search? Contact ***the searcher or contact:***

Mary Hale, Information Branch Supervisor
308-4258, CM1-1E01

Voluntary Results Feedback Form

- *I am an examiner in Workgroup:* ☐ *Example: 1610*
- *Relevant prior art **found**, search results used as follows:*
  - ☐ 102 rejection
  - ☐ 103 rejection
  - ☐ Cited as being of interest.
  - ☐ Helped examiner better understand the invention.
  - ☐ Helped examiner better understand the state of the art in their technology.

  Types of relevant prior art found:
  - ☐ Foreign Patent(s)
  - ☐ Non-Patent Literature
    (journal articles, conference proceedings, new product announcements etc.)
- *Relevant prior art **not found:***
  - ☐ Results verified the lack of relevant prior art (helped determine patentability).
  - ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC/Biotech-Chem Library CM1 – Circ. Desk

sira
Search and Information Resources Administration

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=> fil reg
FILE 'REGISTRY' ENTERED AT 12:18:09 ON 31 OCT 2005
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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   30 OCT 2005  HIGHEST RN 866393-44-4
DICTIONARY FILE UPDATES:  30 OCT 2005  HIGHEST RN 866393-44-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

*************************************************************************
*                                                                       *
* The CA roles and document type information have been removed from     *
* the IDE default display format and the ED field has been added,       *
* effective March 20, 2005.  A new display format, IDERL, is now        *
* available and contains the CA role and document type information.     *
*                                                                       *
*************************************************************************

Structure search iteration limits have been increased.  See HELP SLIMITS
for details.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=> d sta que l9
L1              STR
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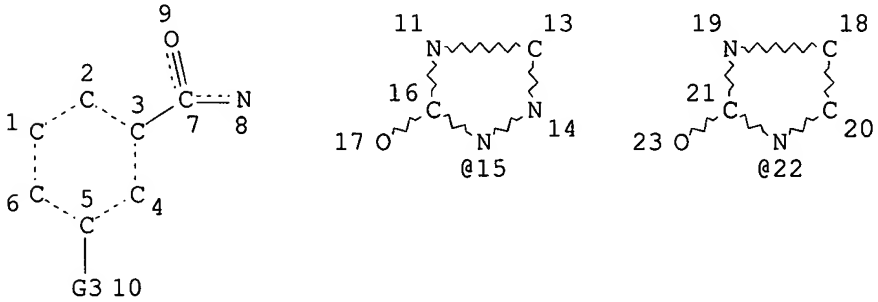


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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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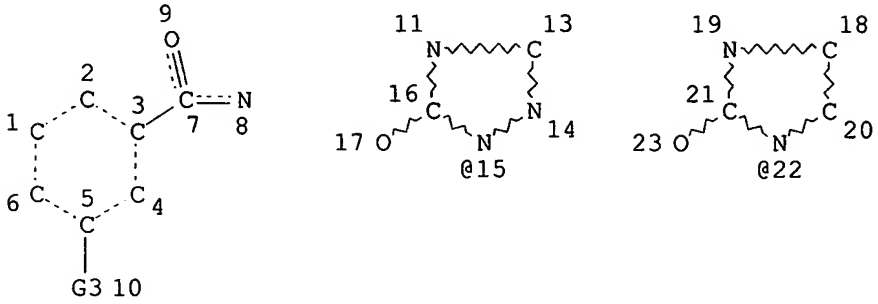
L4 STR



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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC 1 13 18
NUMBER OF NODES IS 22

STEREO ATTRIBUTES: NONE
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L7 17 SEA FILE=REGISTRY ABB=ON PLU=ON L6 AND 16.195.3/RID
L8 18 SEA FILE=REGISTRY ABB=ON PLU=ON L6 NOT L7
L9 17 SEA FILE=REGISTRY ABB=ON PLU=ON L8 NOT C31H36CL3N5O4

=> d ide can 19 tot

L9 ANSWER 1 OF 17 REGISTRY COPYRIGHT 2005 ACS on STN
RN 723242-87-3 REGISTRY
ED Entered STN: 07 Aug 2004
CN Benzamide, 2-chloro-5-[4,5-dihydro-4-(2-hydroxy-2-methylpropyl)-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-N-[(1-hydroxycycloheptyl)methyl]- (9CI) (CA INDEX NAME)
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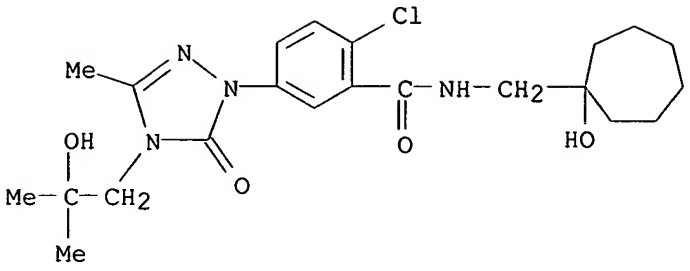
MF C22 H31 Cl N4 O4
SR CA
LC STN Files: CA, CAPLUS



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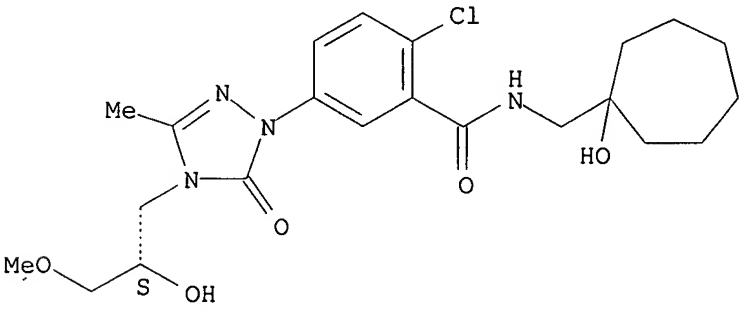
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:123633

L9 ANSWER 2 OF 17 REGISTRY COPYRIGHT 2005 ACS on STN
RN 723242-86-2 REGISTRY
ED Entered STN: 07 Aug 2004
CN Benzamide, 2-chloro-5-[4,5-dihydro-4-[(2S)-2-hydroxy-3-methoxypropyl]-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-N-[(1-hydroxycycloheptyl)methyl]-(9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C22 H31 Cl N4 O5
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

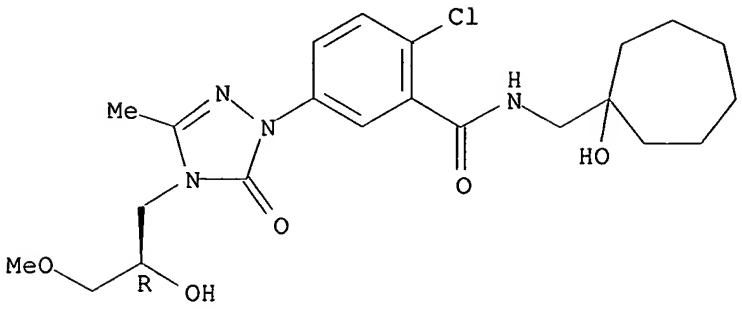
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:123633

L9 ANSWER 3 OF 17 REGISTRY COPYRIGHT 2005 ACS on STN
RN 723242-85-1 REGISTRY
ED Entered STN: 07 Aug 2004
CN Benzamide, 2-chloro-5-[4,5-dihydro-4-[(2R)-2-hydroxy-3-methoxypropyl]-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-N-[(1-hydroxycycloheptyl)methyl]-

(9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C22 H31 Cl N4 O5
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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L9 ANSWER 4 OF 17 REGISTRY COPYRIGHT 2005 ACS on STN
RN 723242-84-0 REGISTRY
ED Entered STN: 07 Aug 2004
CN Benzamide, 5-[4-(2-aminoethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-2-chloro-N-[(1-hydroxycycloheptyl)methyl]- (9CI) (CA INDEX NAME)
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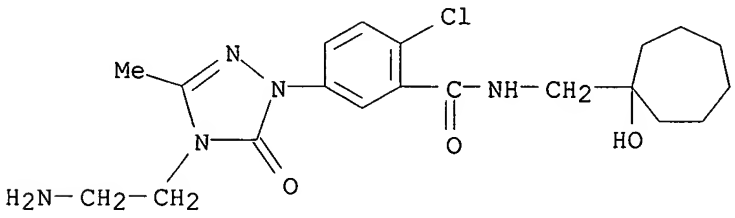

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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:123633

L9 ANSWER 5 OF 17 REGISTRY COPYRIGHT 2005 ACS on STN
RN 723242-83-9 REGISTRY

ED Entered STN: 07 Aug 2004
CN Benzamide, 2-chloro-5-[4,5-dihydro-4-(2-hydroxyethyl)-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-N-[(1-hydroxycycloheptyl)methyl]- (9CI) (CA INDEX NAME)
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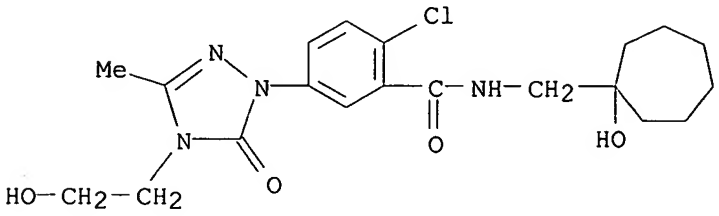

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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:123633

L9 ANSWER 6 OF 17 REGISTRY COPYRIGHT 2005 ACS on STN
RN 723242-82-8 REGISTRY
ED Entered STN: 07 Aug 2004
CN 4H-1,2,4-Triazole-4-acetamide, 1-[4-chloro-3-[[[(1-hydroxycycloheptyl)methyl]amino]carbonyl]phenyl]-1,5-dihydro-3-methyl-5-oxo- (9CI) (CA INDEX NAME)
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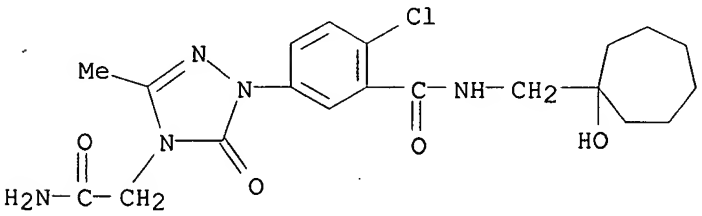

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1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:123633

L9 ANSWER 7 OF 17 REGISTRY COPYRIGHT 2005 ACS on STN
RN 723242-81-7 REGISTRY

ED Entered STN: 07 Aug 2004
CN Benzamide, 2-chloro-5-(2,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl)-N-[(1-hydroxy-3,3-dimethylcyclohexyl)methyl]- (9CI) (CA INDEX NAME)
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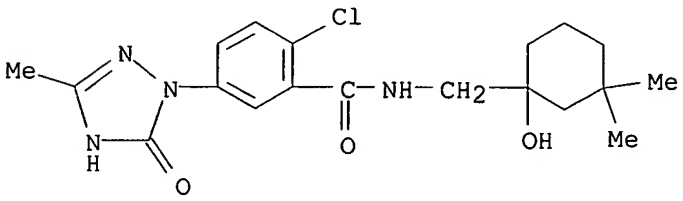
LC STN Files: CA, CAPLUS



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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:123633

L9 ANSWER 8 OF 17 REGISTRY COPYRIGHT 2005 ACS on STN
RN 723242-80-6 REGISTRY
ED Entered STN: 07 Aug 2004
CN Benzamide, 2-chloro-5-[4-(cyanomethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-N-[(1-hydroxycycloheptyl)methyl]- (9CI) (CA INDEX NAME)
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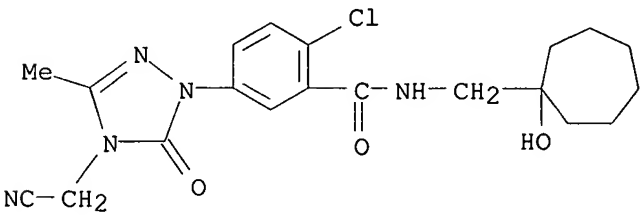

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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:123633

L9 ANSWER 9 OF 17 REGISTRY COPYRIGHT 2005 ACS on STN
RN 723242-79-3 REGISTRY
ED Entered STN: 07 Aug 2004
CN Benzamide, 2-chloro-5-[4,5-dihydro-4-(2-methoxyethyl)-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-N-[(1-hydroxycycloheptyl)methyl]- (9CI) (CA INDEX

NAME)
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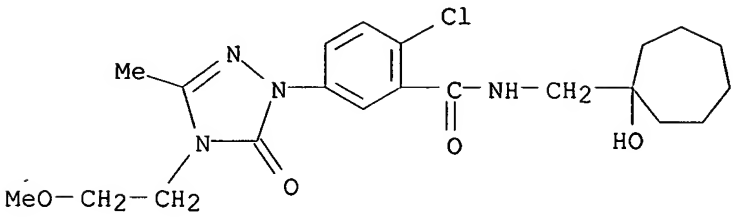

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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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RN 723242-78-2 REGISTRY
ED Entered STN: 07 Aug 2004
CN Benzamide, 2-chloro-5-[4-(cyanomethyl)-4,5-dihydro-5-oxo-1H-1,2,4-triazol-1-yl]-N-[(1-hydroxycycloheptyl)methyl]- (9CI) (CA INDEX NAME)
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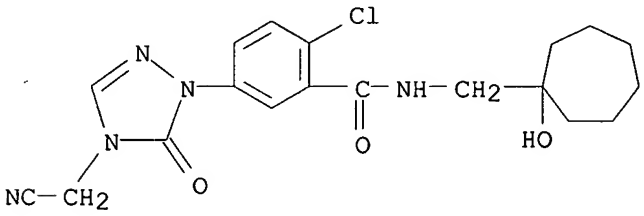

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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:123633

L9 ANSWER 11 OF 17 REGISTRY COPYRIGHT 2005 ACS on STN
RN 723242-77-1 REGISTRY
ED Entered STN: 07 Aug 2004
CN Benzamide, 2-chloro-5-[4,5-dihydro-4-(2-hydroxyethyl)-5-oxo-1H-1,2,4-triazol-1-yl]-N-[(1-hydroxycycloheptyl)methyl]- (9CI) (CA INDEX NAME)
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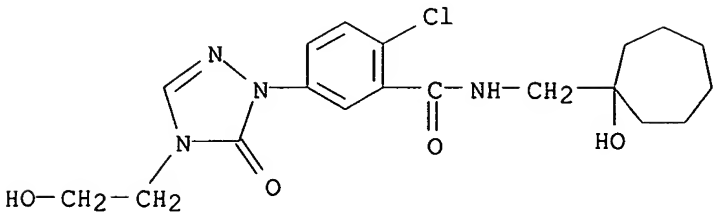

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RN 723242-76-0 REGISTRY
ED Entered STN: 07 Aug 2004
CN Benzamide, 2-chloro-5-(2,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl)-N-[(1-hydroxycycloheptyl)methyl]- (9CI) (CA INDEX NAME)
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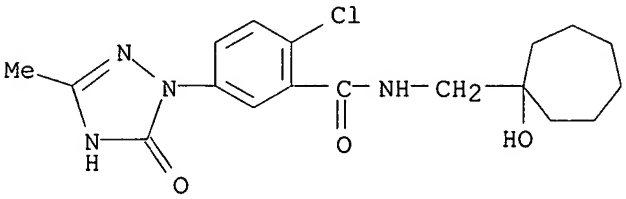

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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:123633

L9 ANSWER 13 OF 17 REGISTRY COPYRIGHT 2005 ACS on STN
RN 723242-75-9 REGISTRY
ED Entered STN: 07 Aug 2004
CN Benzamide, 2-chloro-5-(2,5-dihydro-5-oxo-1H-1,2,4-triazol-1-yl)-N-[(1-hydroxycycloheptyl)methyl]- (9CI) (CA INDEX NAME)
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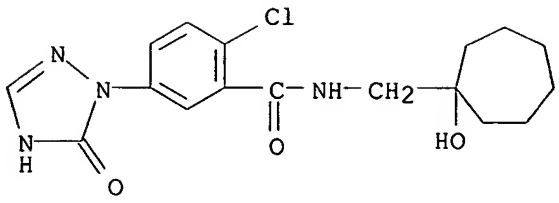

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REFERENCE 1: 141:123633

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RN 723242-74-8 REGISTRY
ED Entered STN: 07 Aug 2004
CN Benzamide, 2-chloro-5-[4,5-dihydro-4-(2-methoxyethyl)-5-oxo-1H-1,2,4-triazol-1-yl]-N-[(1-hydroxycycloheptyl)methyl]- (9CI) (CA INDEX NAME)
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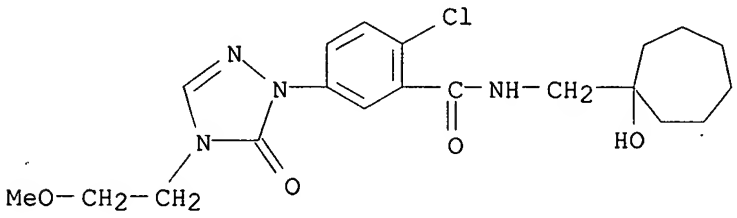

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1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:123633

L9 ANSWER 15 OF 17 REGISTRY COPYRIGHT 2005 ACS on STN
RN 159545-52-5 REGISTRY
ED Entered STN: 14 Dec 1994
CN Carbamic acid, [[4'-[[3-butyl-1-[3-[(ethylamino)carbonyl]phenyl]-1,5-dihydro-5-oxo-4H-1,2,4-triazol-4-yl]methyl]-3'-fluoro-5-propyl[1,1'-biphenyl]-2-yl]sulfonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)
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MF C36 H44 F N5 O6 S
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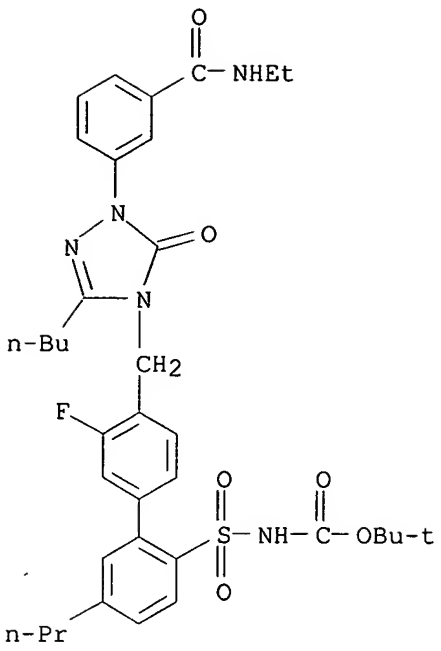

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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 122:10037

L9 ANSWER 16 OF 17 REGISTRY COPYRIGHT 2005 ACS on STN
RN 159545-50-3 REGISTRY
ED Entered STN: 14 Dec 1994
CN Carbamic acid, [[4'-[[3-butyl-1-[3-[(butylamino)carbonyl]phenyl]-1,5-dihydro-5-oxo-4H-1,2,4-triazol-4-yl]methyl]-3'-fluoro[1,1'-biphenyl]-2-yl]sulfonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)
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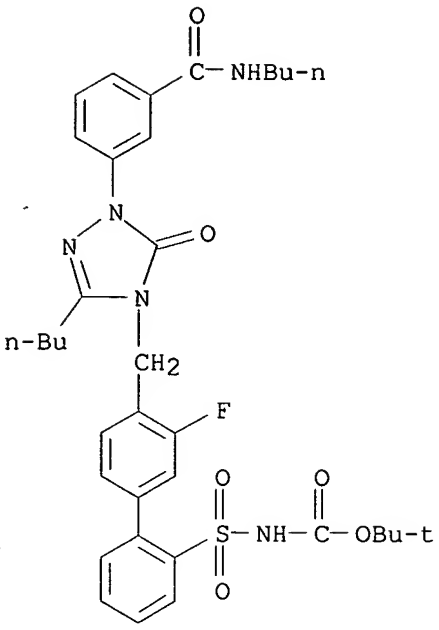

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 122:10037

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RN 159545-48-9 REGISTRY
ED Entered STN: 14 Dec 1994
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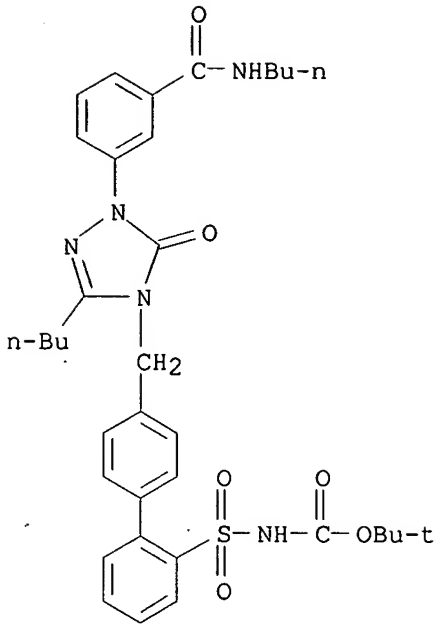
FS 3D CONCORD
MF C35 H43 N5 O6 S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 122:10037

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FILE 'REGISTRY' ENTERED AT 12:06:54 ON 31 OCT 2005
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L2 7 S L1
L3 124 S L1 FUL
SAV TEMP L3 SHIAO748/A
L4 STR L1
L5 2 S L4 CSS SAM SUB=L3
L6 35 S L4 CSS FUL SUB=L3
SAV L6 SHIAO748A/A TEMP
L7 17 S L6 AND 16.195.3/RID
L8 18 S L6 NOT L7
L9 17 S L8 NOT C31H36CL3N5O4
SAV L9 SHIAO748B/A
L10 18 S L6 NOT L9

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L11 0 S L9
L12 0 S L10

FILE 'HCAPLUS' ENTERED AT 12:14:38 ON 31 OCT 2005
L13 2 S L9

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L14            6 S L10
                 E DOMBROSKI M/AU
L15           40 S E3,E4,E9,E10
                 E DUPLANTIER A/AU
L16           29 S E3-E6
                 E SUBRAMANYAM C/AU
L17           73 S E3-E6,E8
L18            1 S L13 AND L15-L17
L19            0 S L14 AND L15-L17
L20            1 S L13 AND PFIZER?/PA,CS
L21            0 S L14 AND PFIZER?/PA,CS
L22            2 S L13,L18,L20
L23            6 S L14 NOT L22

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L24            1 S L9

     FILE 'REGISTRY' ENTERED AT 12:18:09 ON 31 OCT 2005

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CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 12:18:27 ON 31 OCT 2005
CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

=> d 124 bib abs hitstr

L24  ANSWER 1 OF 1  USPATFULL on STN
AN      94:7707  USPATFULL
TI      Substituted 1,2,4-triazoles bearing acidic functional groups as
        angiotensin II antagonists
IN      Ashton, Wallace T., Clark, NJ, United States
        Chakravarty, Prasun K., Edison, NJ, United States
        Chang, Linda L., Wayne, NJ, United States
        Greenlee, William J., Teaneck, NJ, United States
        Kim, Dooseop, Scotch Plains, NJ, United States
        Mantlo, Nathan B., Westfield, NJ, United States
        Patchett, Arthur A., Westfield, NJ, United States
PA      Merck & Co., Inc., Rahway, NJ, United States (U.S. corporation)
PI      US 5281614              19940125
AI      US 1992-970360          19921102 (7)
RLI     Continuation-in-part of Ser. No. US 1992-875038, filed on 1 May 1992,
        now abandoned which is a continuation-in-part of Ser. No. US
        1991-698505, filed on 10 May 1991, now abandoned
DT      Utility
FS      Granted
EXNAM   Primary Examiner: Tsang, Cecilia; Assistant Examiner: Gupta, Y. N.
LREP    Camara, Valerie J., Daniel, Mark R., DiPrima, Joseph F.
CLMN    Number of Claims: 11
ECL     Exemplary Claim: 1
DRWN    No Drawings
LN.CNT 5081
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB      Novel substituted triazolinone, triazolinethione, and triazolinimine
        compounds of the formula I are useful as angiotensin II antagonists.
        ##STR1##

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT  159545-48-9P 159545-50-3P 159545-52-5P
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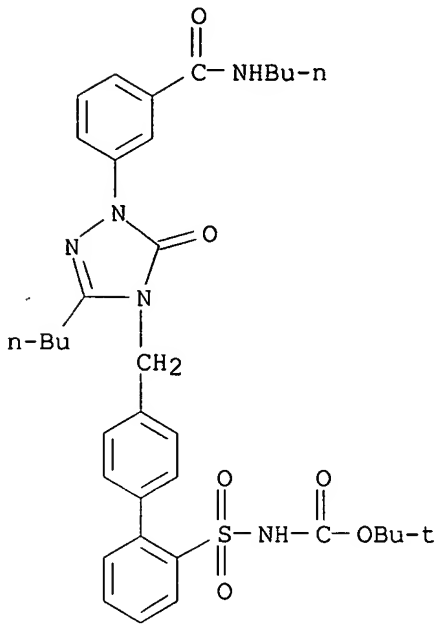
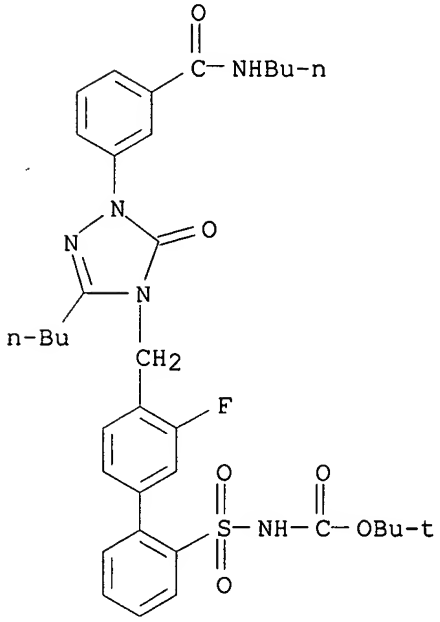
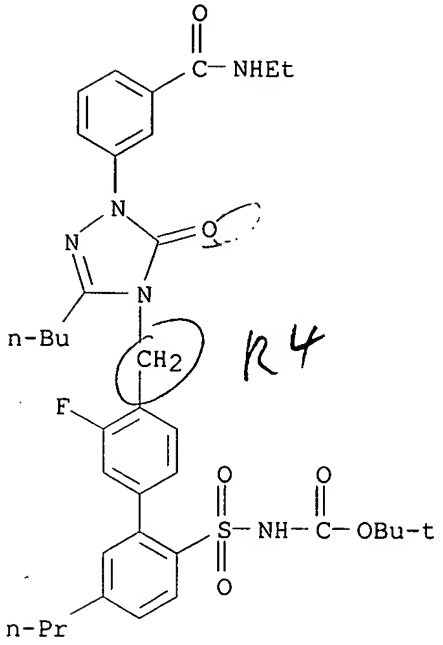
(preparation of, as angiotensin II antagonist)
RN 159545-48-9 USPATFULL
CN Carbamic acid, [[4'-[[3-butyl-1-[3-[(butylamino)carbonyl]phenyl]-1,5-dihydro-5-oxo-4H-1,2,4-triazol-4-yl]methyl][1,1'-biphenyl]-2-yl]sulfonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 159545-50-3 USPATFULL
CN Carbamic acid, [[4'-[[3-butyl-1-[3-[(butylamino)carbonyl]phenyl]-1,5-dihydro-5-oxo-4H-1,2,4-triazol-4-yl]methyl]-3'-fluoro[1,1'-biphenyl]-2-yl]sulfonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 159545-52-5 USPATFULL
CN Carbamic acid, [[4'-[[3-butyl-1-[3-[(ethylamino)carbonyl]phenyl]-1,5-dihydro-5-oxo-4H-1,2,4-triazol-4-yl]methyl]-3'-fluoro-5-propyl[1,1'-biphenyl]-2-yl]sulfonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 12:18:43 ON 31 OCT 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 31 Oct 2005 VOL 143 ISS 19
FILE LAST UPDATED: 30 Oct 2005 (20051030/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

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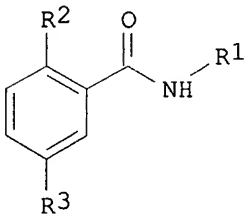
L13 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:565226 HCAPLUS
DN 141:123633
ED Entered STN: 15 Jul 2004
TI Preparation of benzamide inhibitors of the P2x7 receptor
IN Duplantier, Allen J.; Subramanyam, Chakrapani; Dombroski, Mark A.
PA Pfizer Products Inc., USA
SO PCT Int. Appl., 79 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07D249-12
ICS C07D233-70; A61K031-4196; A61P011-00; A61P037-00
CC 28-10 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004058731	A1	20040715	WO 2003-IB6232	20031230
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2511189	AA	20040715	CA 2003-2511189	20031230
	EP 1581507	A1	20051005	EP 2003-780483	20031230
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
PRAI	US 2002-437228P	P	20021231		
	WO 2003-IB6232	W	20031230		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2004058731	ICM	C07D249-12
	ICS	C07D233-70; A61K031-4196; A61P011-00; A61P037-00
WO 2004058731	ECLA	C07D233/70; C07D249/12
CA 2511189	ECLA	C07D233/70; C07D249/12
EP 1581507	ECLA	C07D233/70; C07D249/12

OS MARPAT 141:123633
GI



I

AB Title benzamide derivs. I (R1 = alkyl, optionally substituted by cycloalkyl, aryl, heteroaryl; R2 = H, halo, cyano, optionally substituted alkyl; R3 = suitably substituted nitrogen-linked heterocyclyl) and pharmaceutically acceptable salts, useful as P2X7 receptor antagonists, are prepared Thus, 2-chloro-N-(1-hydroxycycloheptylmethyl)-5-[4-(2-methoxyethyl)-5-oxo-4,5-dihydro[1,2,4]triazol-1-yl]benzamide was prepared in a multi-step synthesis from 5-amino-2-chlorobenzoic acid. The compds. of the invention are useful in the treatment of IL-1 mediated disorders, including, without limitation, inflammatory diseases such as osteoarthritis and rheumatoid arthritis; allergies, asthma, COPD, cancer, reperfusion or ischemia in stroke or heart attack, autoimmune diseases and other disorders.

ST benzamide triazolyl prepn purinergic receptor antagonist

IT Purinoceptor antagonists
(P2x7; preparation of benzamide inhibitors of the P2x7 receptor)

IT Purinoceptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(P2x7; preparation of benzamide inhibitors of the P2x7 receptor)

IT Interleukin 1
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(preparation of benzamide derivs. for treatment of IL-1 mediated disease)

IT 89-54-3, 5-Amino-2-chlorobenzoic acid 298-12-4, Oxoacetic acid 2815-39-6 6482-24-2, 2-Bromoethyl methyl ether 26386-88-9, Diphenylphosphoryl azide 64491-70-9, (R)-Glycidyl methyl ether
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of benzamide inhibitors of the P2x7 receptor)

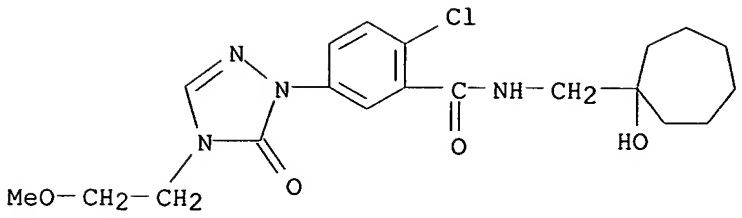
IT 42122-75-8P, 5-Amino-2-chlorobenzoic acid methyl ester 723242-88-4P 723242-89-5P 723242-90-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of benzamide inhibitors of the P2x7 receptor)

IT **723242-74-8P 723242-75-9P 723242-76-0P**
723242-77-1P 723242-78-2P 723242-79-3P
723242-80-6P 723242-81-7P 723242-82-8P
723242-83-9P 723242-84-0P 723242-85-1P
723242-86-2P 723242-87-3P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of benzamide inhibitors of the P2x7 receptor)

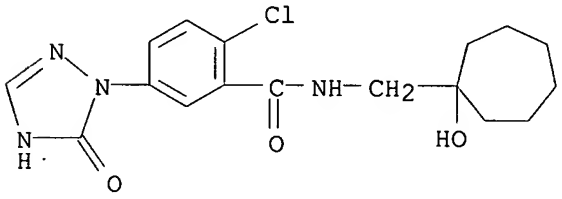
IT **723242-74-8P 723242-75-9P 723242-76-0P**
723242-77-1P 723242-78-2P 723242-79-3P
723242-80-6P 723242-81-7P 723242-82-8P
723242-83-9P 723242-84-0P 723242-85-1P
723242-86-2P 723242-87-3P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of benzamide inhibitors of the P2x7 receptor)

RN 723242-74-8 HCAPLUS

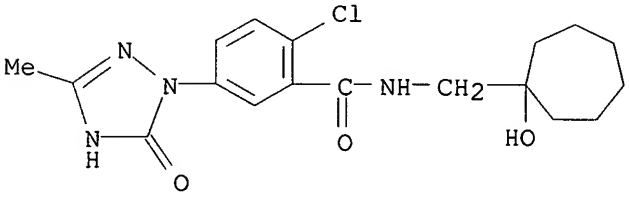
CN Benzamide, 2-chloro-5-[4,5-dihydro-4-(2-methoxyethyl)-5-oxo-1H-1,2,4-triazol-1-yl]-N-[(1-hydroxycycloheptyl)methyl]- (9CI) (CA INDEX NAME)



RN 723242-75-9 HCAPLUS
CN Benzamide, 2-chloro-5-(2,5-dihydro-5-oxo-1H-1,2,4-triazol-1-yl)-N-[(1-hydroxycycloheptyl)methyl]- (9CI) (CA INDEX NAME)



RN 723242-76-0 HCAPLUS
CN Benzamide, 2-chloro-5-(2,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl)-N-[(1-hydroxycycloheptyl)methyl]- (9CI) (CA INDEX NAME)



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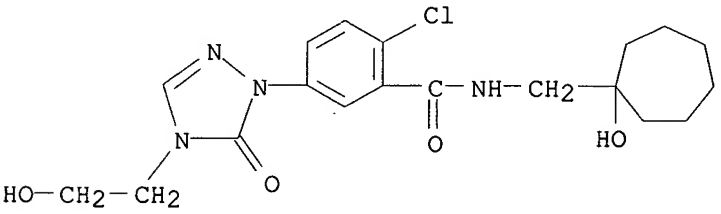

RN 723242-78-2 HCAPLUS
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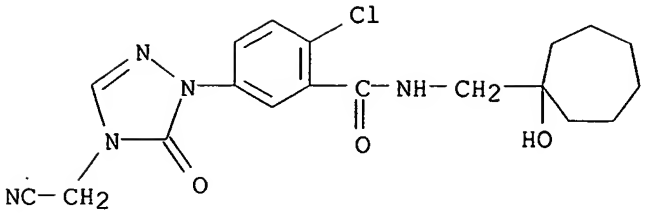
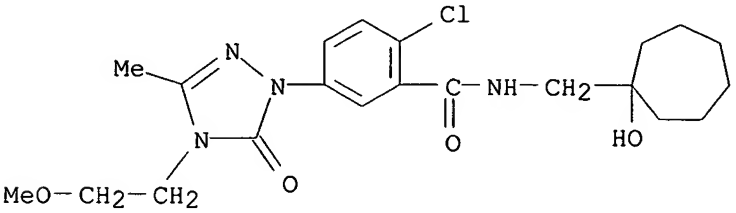


RN 723242-79-3 HCAPLUS
CN Benzamide, 2-chloro-5-[4,5-dihydro-4-(2-methoxyethyl)-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-N-[(1-hydroxycycloheptyl)methyl]- (9CI) (CA INDEX NAME)



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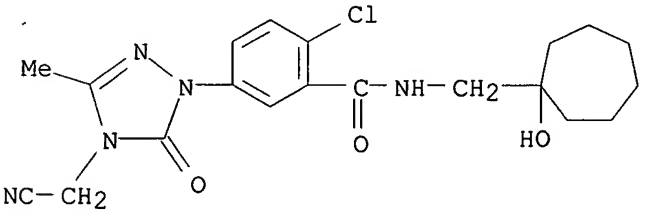
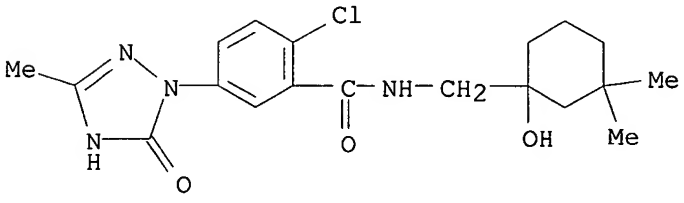
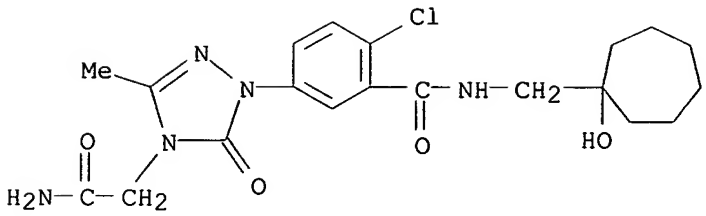
CN Benzamide, 2-chloro-5-[4-(cyanomethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-N-[(1-hydroxycycloheptyl)methyl]- (9CI) (CA INDEX NAME)



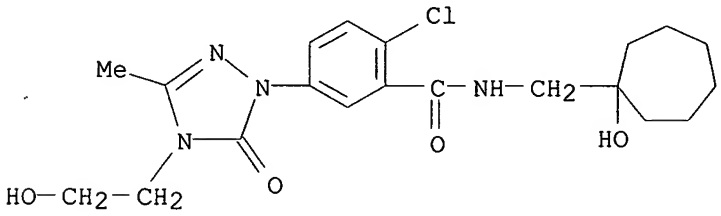
RN 723242-81-7 HCAPLUS
CN Benzamide, 2-chloro-5-(2,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl)-N-[(1-hydroxy-3,3-dimethylcyclohexyl)methyl]- (9CI) (CA INDEX NAME)



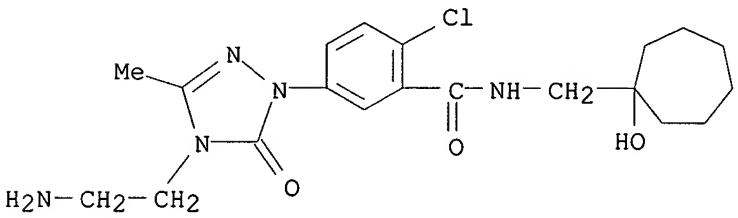
RN 723242-82-8 HCAPLUS
CN 4H-1,2,4-Triazole-4-acetamide, 1-[4-chloro-3-[[[(1-hydroxycycloheptyl)methyl]amino]carbonyl]phenyl]-1,5-dihydro-3-methyl-5-oxo- (9CI) (CA INDEX NAME)



RN 723242-83-9 HCAPLUS
CN Benzamide, 2-chloro-5-[4,5-dihydro-4-(2-hydroxyethyl)-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-N-[(1-hydroxycycloheptyl)methyl]- (9CI) (CA INDEX NAME)

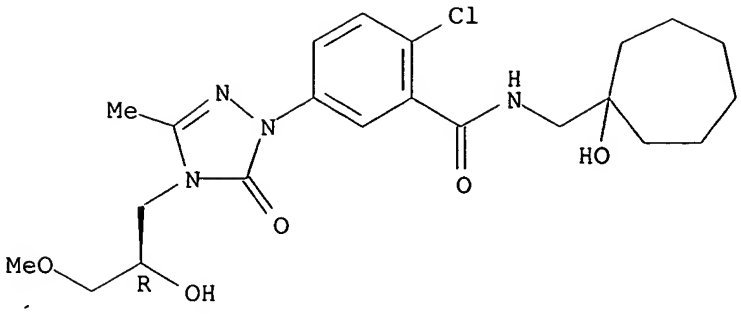


RN 723242-84-0 HCAPLUS
CN Benzamide, 5-[4-(2-aminoethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-2-chloro-N-[(1-hydroxycycloheptyl)methyl]- (9CI) (CA INDEX NAME)



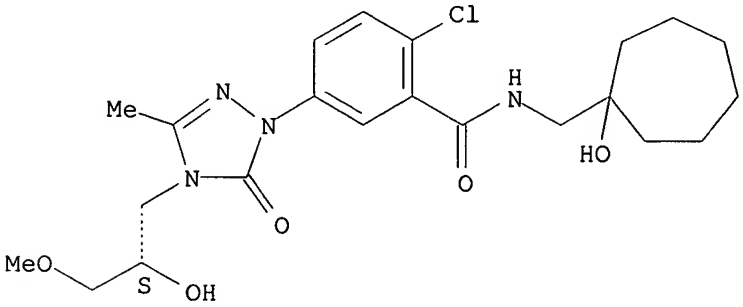
RN 723242-85-1 HCAPLUS
CN Benzamide, 2-chloro-5-[4,5-dihydro-4-[(2R)-2-hydroxy-3-methoxypropyl]-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-N-[(1-hydroxycycloheptyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

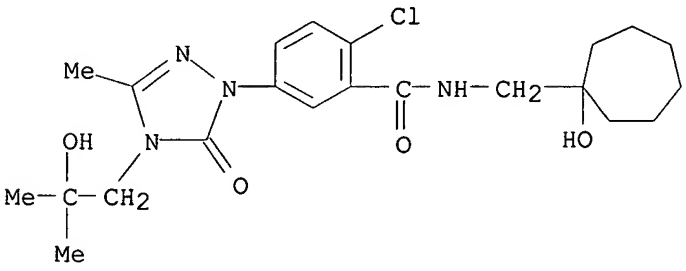


RN 723242-86-2 HCAPLUS
CN Benzamide, 2-chloro-5-[4,5-dihydro-4-[(2S)-2-hydroxy-3-methoxypropyl]-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-N-[(1-hydroxycycloheptyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 723242-87-3 HCAPLUS
CN Benzamide, 2-chloro-5-[4,5-dihydro-4-(2-hydroxy-2-methylpropyl)-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-N-[(1-hydroxycycloheptyl)methyl]- (9CI) (CA INDEX NAME)



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L13 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2005 ACS on STN
TI Preparation of substituted 1,2,4-triazoles bearing acidic functional groups as angiotensin II antagonists

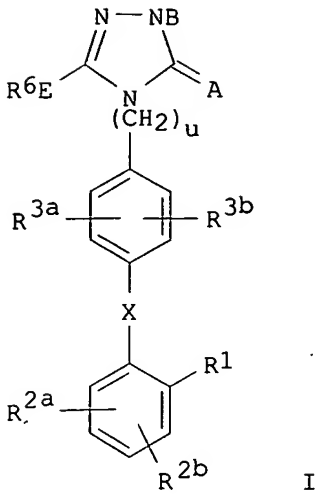
IN Ashton, Wallace T.; Chakravarty, Prasun K.; Chang, Linda L.; Greenlee, William J.; Kim, Dooseop; Mantlo, Nathan B.; Patchett, Arthur A.
AN 1995:234501 HCAPLUS
DN 122:10037
ED Entered STN: 10 Dec 1994
TI Preparation of substituted 1,2,4-triazoles bearing acidic functional groups as angiotensin II antagonists
IN Ashton, Wallace T.; Chakravarty, Prasun K.; Chang, Linda L.; Greenlee, William J.; Kim, Dooseop; Mantlo, Nathan B.; Patchett, Arthur A.
PA Merck and Co., Inc., USA
SO U.S., 75 pp. Cont.-in-part of U.S. Ser. No. 875,038, abandoned.
CODEN: USXXAM
DT Patent
LA English
IC ICM A61K031-41
ICS A61K031-505; A61K031-535; C07D249-10; C07D249-12; C07D249-14
INCL 514359000
CC 28-10 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1, 63
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5281614	A	19940125	US 1992-970360	19921102
	CA 2109524	AA	19921111	CA 1992-2109524	19920505
	US 5436259	A	19950725	US 1993-154883	19931118
PRAI	US 1991-698505	B2	19910510		
	US 1992-875038	B2	19920501		
	US 1992-970360	A2	19921102		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 5281614	ICM	A61K031-41
	ICS	A61K031-505; A61K031-535; C07D249-10; C07D249-12; C07D249-14
	INCL	514359000
US 5281614	NCL	514/359.000; 514/093.000; 514/222.500; 514/227.800; 514/231.500; 514/235.500; 514/236.200; 514/236.500; 514/236.800; 514/237.800; 514/238.200; 514/238.800; 514/253.090; 514/254.050; 514/256.000; 514/340.000; 514/343.000; 514/361.000; 514/362.000; 514/364.000; 514/365.000; 514/383.000; 514/384.000; 544/002.000; 544/060.000; 544/111.000; 544/122.000; 544/124.000; 544/132.000; 544/133.000; 544/243.000
US 5436259	NCL	514/384.000; 514/359.000; 548/262.800; 548/263.200; 548/264.600
	ECLA	C07D249/12; C07D413/10+271+249; C07D417/10+285+249; C07D417/10+285B+249; C07D419/10+291+249

OS MARPAT 122:10037
GI



I

AB Title compds. I [R1 = R22SO2NHSO2, R22O2CNHSO2, NCNHSO2, (R24)2P(O)NHSO2, R24P(O)NHCO, substituted heterocyclyl wherein R22 = (substituted) Ph, -C1-6 alkyl, -C2-6 alkenyl, -C2-6 alkynyl, heteroaryl, (substituted) C3-7 cycloalkyl, etc., R24 = aryl , (substituted) C1-6 alkyl, etc.; R2a, R2b = H, halo, (substituted) amino, O2N, F3C, (substituted) C1-6 alkyl, heterocyclyl, etc., R2aR2b = Ph; R3a = H, halo, C1-6 alkyl, C1-6 alkoxy, etc.; R3b = H, halo, C1-6 alkyl, C1-5 alkylcarbonyloxy, C3-5 cycloalkyl, C1-6 alkoxy, etc, R3aR3b = Ph, biphenyl, (substituted) naphthyl; A = O, S, R21N wherein R21 = H, (substituted) Ph, -C1-6 alkyl, etc.; B = (substituted) C1-10 alkyl, halo, H, (substituted) aryl, etc.; E = bond, (substituted) amino, alkylsulfonyl, CHOH, alkoxy, CO; R6 = (substituted) Ph, -C1-6 alkyl, -heteroaryl, -C3-7 cycloalkyl, etc.; X = bond, CO, O, S, etc.; u = 1,2] or a salt thereof, showing activity as angiotensin II antagonists, are prepared N-[[2'-carboxybiphenyl-4-yl]methyl]phthalimide (preparation given) was converted in 4 steps to 4-[[2'-(tert-butoxycarbonyl)biphenyl-4-yl]-5-n-butyl]-2,4-dihydro-3H-1,2,4-triazole-3-thione which was treated with F3CCO2H to give I (R1 = HO2C, A = S, B = R2a = R2b = R3a = R3b = H, R6E = Bu, X = bond, u = 1).

ST triazole substituted prepn angiotensin antagonist; butylcarboxybiphenylyl triazolethione prepn angiotensin antagonist

IT Nervous system agents
(substituted triazoles)

IT Antihypertensives
(substituted triazoles as, angiotensin II receptor antagonists in relation to)

IT Glaucoma (disease)
(treatment of. substituted triazoles for)

IT Receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(angiotensin II, antagonists, substituted triazoles)

IT 937-12-2P, p-Tolyltrimethyltin 999-09-7P, Ethyl valerimidate
40872-87-5P 83483-30-1P, Ethyl N-carbethoxyvalerimidate 89981-25-9P
133690-72-9P 133690-73-0P 133690-74-1P 133690-75-2P 133690-76-3P
133690-78-5P 133690-79-6P 133690-91-2P 133690-92-3P 138733-50-3P
138733-51-4P 138733-52-5P 145004-90-6P 145004-91-7P 145004-92-8P
146948-92-7P 146948-93-8P 146948-94-9P 146948-95-0P 146948-96-1P
146948-97-2P 146948-98-3P 146948-99-4P 146949-00-0P 146949-01-1P
146949-02-2P 146949-03-3P 146949-04-4P 146949-05-5P 147776-48-5P

159547-09-8P 159547-10-1P 159547-11-2P 159547-12-3P 159547-13-4P
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159547-34-9P 159547-35-0P 159547-36-1P 159547-37-2P 159547-38-3P
159547-39-4P 159547-40-7P 159547-41-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, in preparation of angiotensin II antagonists)

IT 5133-69-7P 133690-77-4P 133690-83-2P 133690-88-7P 133690-93-4P
133726-98-4P 146948-72-3P 146948-73-4P 146948-74-5P 146948-75-6P
146948-76-7P 146948-77-8P 146948-78-9P 146948-84-7P 146948-85-8P
146948-87-0P 147776-47-4P 159045-11-1P 159045-12-2P 159544-60-2P
159544-61-3P 159544-62-4P 159544-63-5P 159544-64-6P 159544-65-7P
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159544-76-0P 159544-77-1P 159544-78-2P 159544-79-3P 159544-80-6P
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159546-69-7P 159546-70-0P 159546-71-1P 159546-72-2P 159546-73-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of, as angiotensin II antagonist)

IT 159546-74-4P 159546-75-5P 159546-76-6P 159546-77-7P 159546-78-8P
159546-79-9P 159546-80-2P 159546-81-3P 159546-82-4P 159546-83-5P
159546-84-6P 159546-85-7P 159546-86-8P 159546-87-9P 159546-88-0P
159546-89-1P 159546-90-4P 159546-91-5P 159546-92-6P 159546-93-7P
159546-94-8P 159546-95-9P 159546-96-0P 159546-97-1P 159546-98-2P
159546-99-3P 159547-00-9P 159547-01-0P 159547-02-1P 159547-03-2P
159547-04-3P 159547-05-4P 159547-06-5P 159547-07-6P 159547-08-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of, as angiotensin II antagonist)

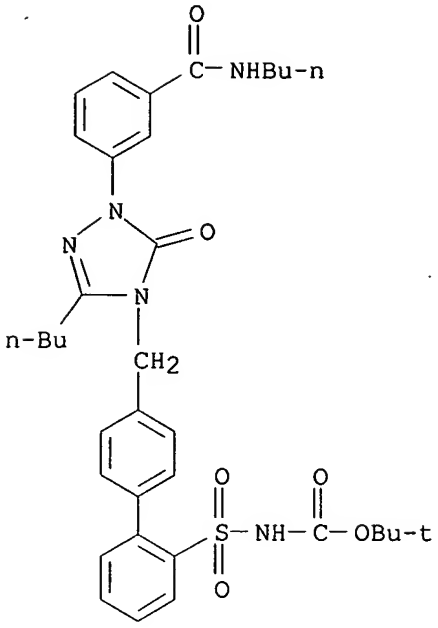
IT 75-64-9, tert-Butylamine, reactions 100-63-0, Phenylhydrazine
104-81-4, 4-Methylbenzyl bromide 358-23-6, Trifluoromethanesulfonic anhydride 365-34-4, 2-(Trifluoromethyl)phenylhydrazine 541-41-3, Ethyl chloroformate 627-03-2, Ethoxyacetic acid 627-04-3, Ethylthioacetic acid 638-29-9, Valeryl chloride 1066-45-1, Trimethyltin chloride
1074-82-4, Potassium phthalimide 1514-87-0, Methyl chlorodifluoroacetate
2905-25-1 4114-31-2, Ethyl carbazate 4294-57-9, p-Tolylmagnesium bromide 5419-55-6, Triisopropyl borate 10147-37-2, Isopropylsulfonyl chloride 10449-07-7, o-Chlorophenylhydrazine 13360-57-1, Dimethylsulfamoyl chloride 13820-09-2, Trimethyl orthovalerate
18542-63-7, Ethyl valerimidate hydrochloride 24424-99-5, Di-tert-butyl dicarbonate 39684-28-1, O-tert-Butylhydroxylamine-hydrochloride
51436-99-8, 4-Bromo-2-fluorotoluene 76283-09-5, 4-Bromo-2-fluorobenzyl bromide 96701-59-6, (2-Chloro-5-nitrophenyl)hydrazine 100367-78-0
114772-40-6, 4-(Bromomethyl)-2'-(tert-butoxycarbonyl)biphenyl
114772-54-2, 4-(Bromomethyl)-2'-cyanobiphenyl 133690-87-6 146949-07-7, 4-Propylbenzenesulfonyl chloride 146949-08-8, 4-Nitro-2-(trifluoromethyl)phenylhydrazine 150691-04-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in preparation of angiotensin II antagonists)

IT 11128-99-7, Angiotensin II
RL: RCT (Reactant); RACT (Reactant or reagent)
(receptors for, antagonists, substituted triazoles)

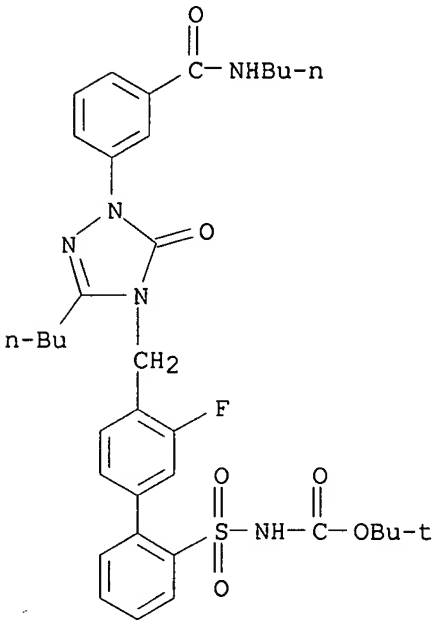
IT **159545-48-9P 159545-50-3P 159545-52-5P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of, as angiotensin II antagonist)

RN 159545-48-9 HCAPLUS

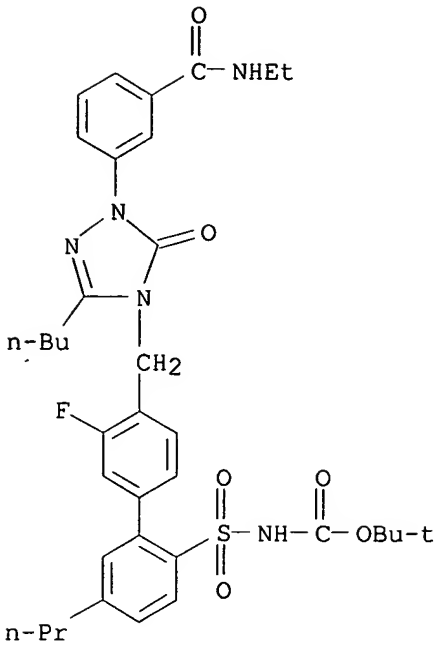
CN Carbamic acid, [[4'-[[3-butyl-1-[3-[(butylamino)carbonyl]phenyl]-1,5-dihydro-5-oxo-4H-1,2,4-triazol-4-yl]methyl][1,1'-biphenyl]-2-yl]sulfonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 159545-50-3 HCAPLUS
CN Carbamic acid, [[4'-[[3-butyl-1-[3-[(butylamino)carbonyl]phenyl]-1,5-dihydro-5-oxo-4H-1,2,4-triazol-4-yl]methyl]-3'-fluoro[1,1'-biphenyl]-2-yl]sulfonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 159545-52-5 HCAPLUS
CN Carbamic acid, [[4'-[[3-butyl-1-[3-[(ethylamino)carbonyl]phenyl]-1,5-dihydro-5-oxo-4H-1,2,4-triazol-4-yl]methyl]-3'-fluoro-5-propyl[1,1'-biphenyl]-2-yl]sulfonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



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FILE 'REGISTRY' ENTERED AT 12:21:40 ON 31 OCT 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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STRUCTURE FILE UPDATES: 30 OCT 2005 HIGHEST RN 866393-44-4
DICTIONARY FILE UPDATES: 30 OCT 2005 HIGHEST RN 866393-44-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when
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*                                                                    *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,    *
* effective March 20, 2005.  A new display format, IDERL, is now     *
* available and contains the CA role and document type information. *
*                                                                    *
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Structure search iteration limits have been increased. See HELP SLIMITS
for details.

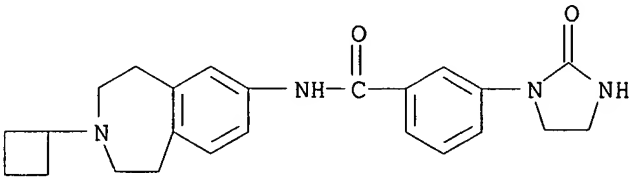
REGISTRY includes numerically searchable data for experimental and

predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=> d l10 ide can tot

L10 ANSWER 1 OF 18 REGISTRY COPYRIGHT 2005 ACS on STN
RN 856901-99-0 REGISTRY
ED Entered STN: 25 Jul 2005
CN Benzamide, N-(3-cyclobutyl-2,3,4,5-tetrahydro-1H-3-benzazepin-7-yl)-3-(2-oxo-1-imidazolidinyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C24 H28 N4 O2
SR CA
LC STN Files: CA, CAPLUS

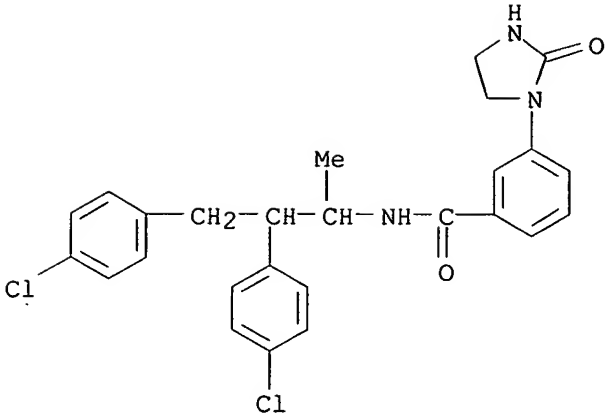


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 143:97280

L10 ANSWER 2 OF 18 REGISTRY COPYRIGHT 2005 ACS on STN
RN 616244-55-4 REGISTRY
ED Entered STN: 13 Nov 2003
CN Benzamide, N-[2,3-bis(4-chlorophenyl)-1-methylpropyl]-3-(2-oxo-1-imidazolidinyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C26 H25 Cl2 N3 O2
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



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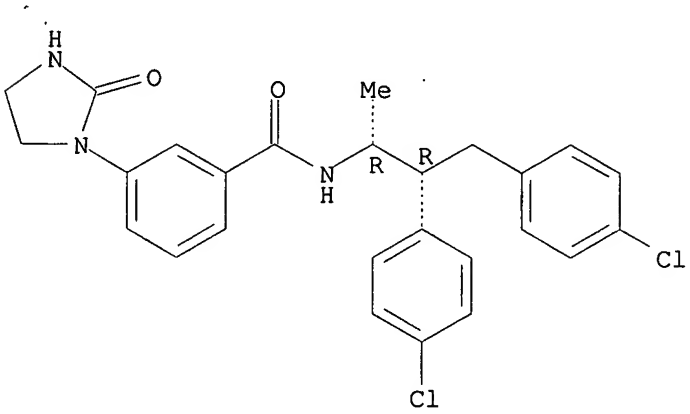
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 139:337785

L10 ANSWER 3 OF 18 REGISTRY COPYRIGHT 2005 ACS on STN
RN 616243-51-7 REGISTRY
ED Entered STN: 13 Nov 2003
CN Benzamide, N-[(1R,2R)-2,3-bis(4-chlorophenyl)-1-methylpropyl]-3-(2-oxo-1-imidazolidinyl)-, rel- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C26 H25 Cl2 N3 O2
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Relative stereochemistry.



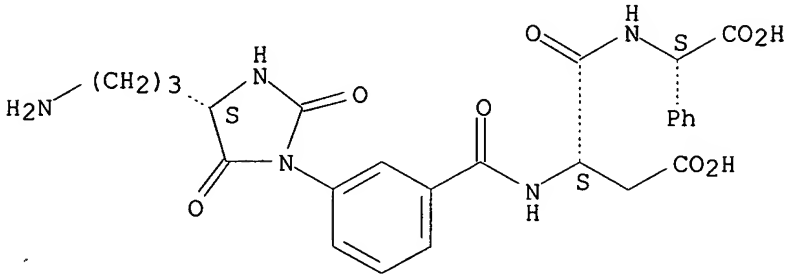
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 139:337785

L10 ANSWER 4 OF 18 REGISTRY COPYRIGHT 2005 ACS on STN
RN 340188-12-7 REGISTRY
ED Entered STN: 08 Jun 2001
CN Glycine, N-[3-[(4S)-4-(3-aminopropyl)-2,5-dioxo-1-imidazolidinyl]benzoyl]-L-α-aspartyl-2-phenyl-, (2S)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C25 H27 N5 O8
SR CA
LC STN Files: CA, CAPLUS, CASREACT

Absolute stereochemistry.



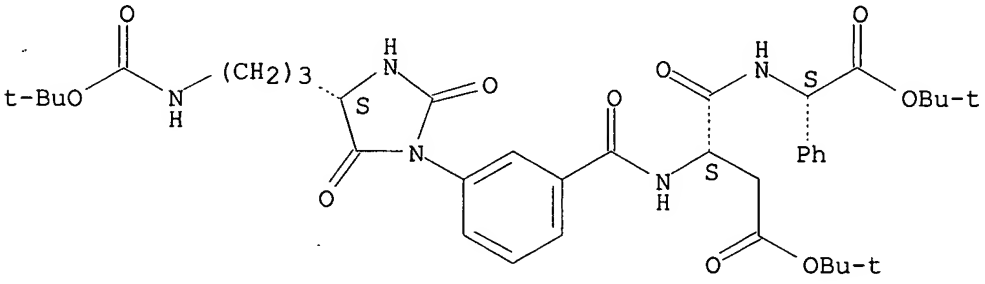
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:360991

L10 ANSWER 5 OF 18 REGISTRY COPYRIGHT 2005 ACS on STN
RN 340188-11-6 REGISTRY
ED Entered STN: 08 Jun 2001
CN Glycine, N-[3-[(4S)-4-[3-[[(1,1-dimethylethoxy)carbonyl]amino]propyl]-2,5-dioxo-1-imidazolidinyl]benzoyl]-L-α-aspartyl-2-phenyl-, bis(1,1-dimethylethyl) ester, (2S)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C38 H51 N5 O10
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



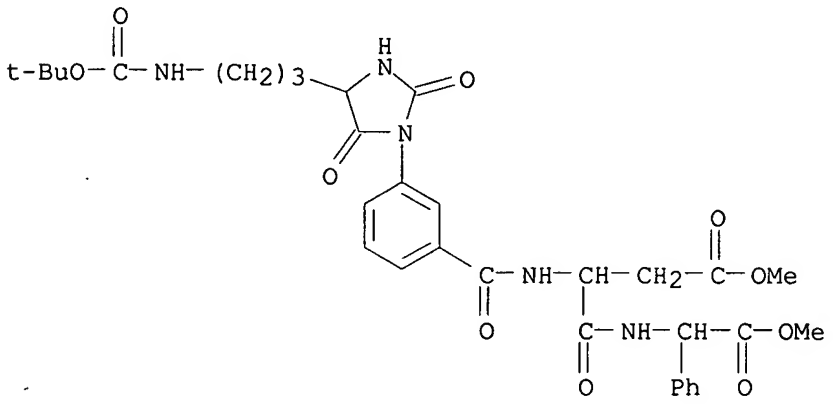
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:360991

L10 ANSWER 6 OF 18 REGISTRY COPYRIGHT 2005 ACS on STN
RN 157702-14-2 REGISTRY
ED Entered STN: 16 Sep 1994
CN Glycine, N-[N-[3-[4-[3-[[(1,1-dimethylethoxy)carbonyl]amino]propyl]-2,5-dioxo-1-imidazolidinyl]benzoyl]-L-α-aspartyl]-L-2-phenyl-, dimethyl ester, (S)- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE
MF C32 H39 N5 O10
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

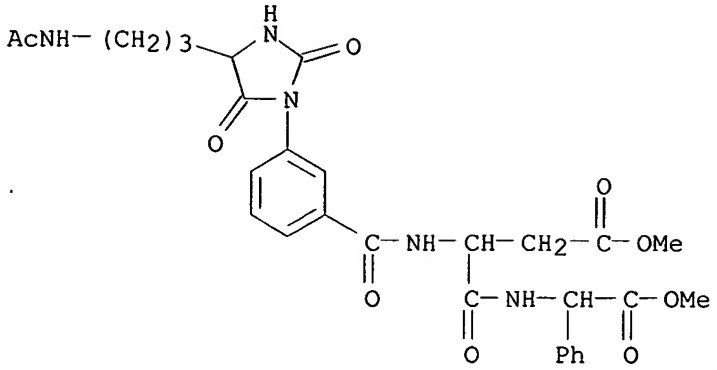


1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 121:180236

L10 ANSWER 7 OF 18 REGISTRY COPYRIGHT 2005 ACS on STN
RN 157702-12-0 REGISTRY
ED Entered STN: 16 Sep 1994
CN Glycine, N-[N-[3-[4-[3-(acetylamino)propyl]-2,5-dioxo-1-imidazolidinyl]benzoyl]-L-α-aspartyl]-L-2-phenyl-, dimethyl ester, (S)- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE
MF C29 H33 N5 O9
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

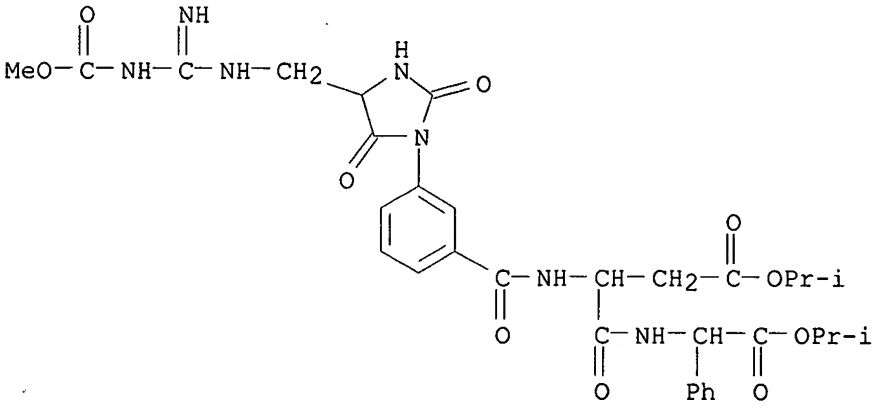
RELATED SEQUENCES AVAILABLE WITH SEQLINK



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 121:180236

L10 ANSWER 8 OF 18 REGISTRY COPYRIGHT 2005 ACS on STN
RN 157702-11-9 REGISTRY
ED Entered STN: 16 Sep 1994
CN Glycine, N-[N-[3-[4-[[[imino[(methoxycarbonyl)amino]methyl]amino]methyl]-2,5-dioxo-1-imidazolidinyl]benzoyl]-L-α-aspartyl]-L-2-phenyl-, bis(1-methylethyl) ester, (S)- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE
MF C32 H39 N7 O10
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



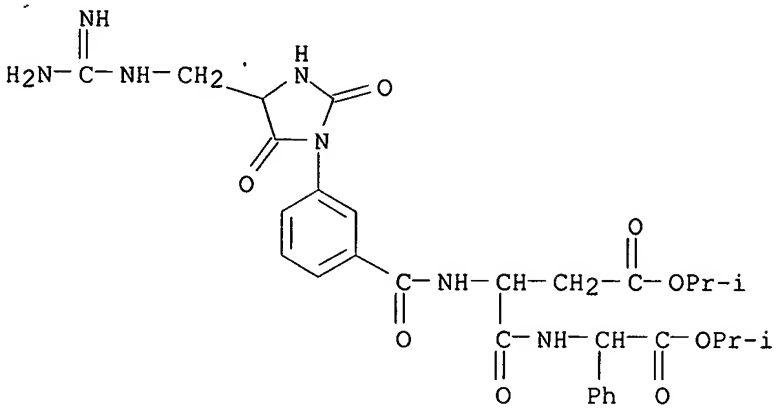
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 121:180236

L10 ANSWER 9 OF 18 REGISTRY COPYRIGHT 2005 ACS on STN
RN 157702-10-8 REGISTRY
ED Entered STN: 16 Sep 1994
CN Glycine, N-[N-[3-[4-[[(aminoiminomethyl)amino]methyl]-2,5-dioxo-1-imidazolidinyl]benzoyl]-L-α-aspartyl]-L-2-phenyl-, bis(1-methylethyl) ester, (S)- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE
MF C30 H37 N7 O8
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

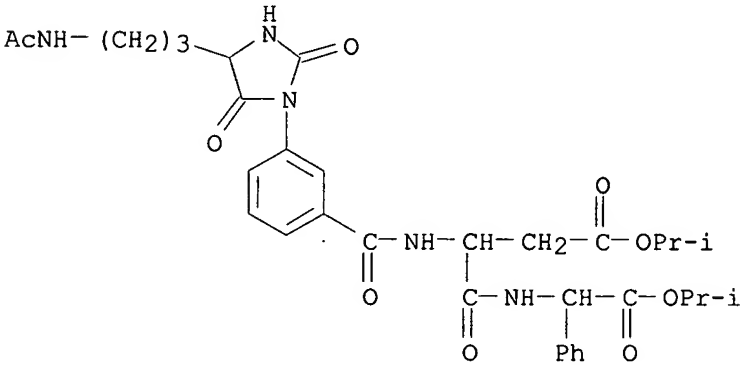


1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 121:180236

L10 ANSWER 10 OF 18 REGISTRY COPYRIGHT 2005 ACS on STN
RN 157702-09-5 REGISTRY
ED Entered STN: 16 Sep 1994
CN Glycine, N-[N-[3-[4-[3-(acetylamino)propyl]-2,5-dioxo-1-imidazolidinyl]benzoyl]-L-α-aspartyl]-L-2-phenyl-, bis(1-methylethyl) ester, (S)- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE
MF C33 H41 N5 O9
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

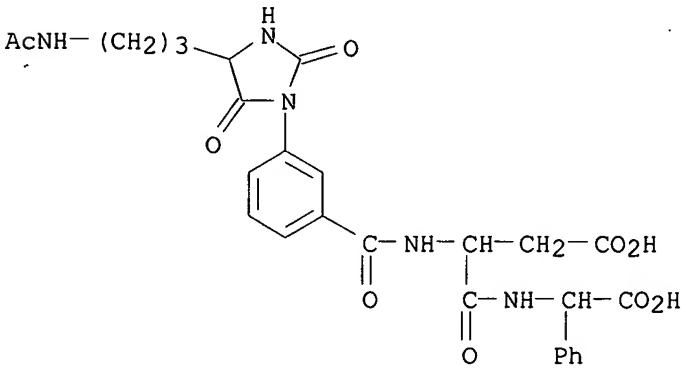


1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 121:180236

L10 ANSWER 11 OF 18 REGISTRY COPYRIGHT 2005 ACS on STN
RN 157702-08-4 REGISTRY
ED Entered STN: 16 Sep 1994
CN Glycine, N-[N-[3-[4-[3-(acetylamino)propyl]-2,5-dioxo-1-imidazolidinyl]benzoyl]-L-α-aspartyl]-L-2-phenyl-, (S)- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE
MF C27 H29 N5 O9
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK



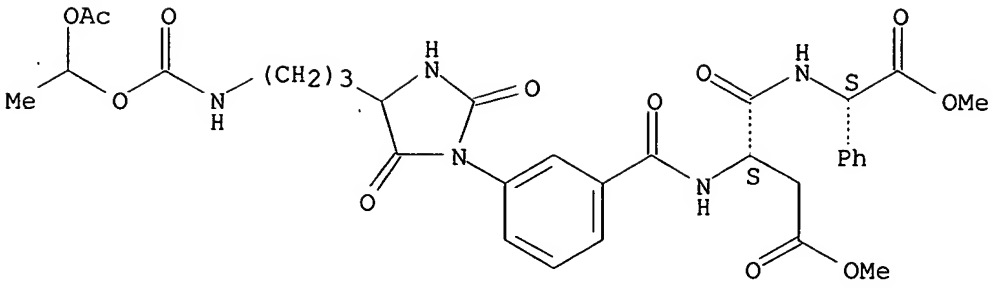
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 121:180236

L10 ANSWER 12 OF 18 REGISTRY COPYRIGHT 2005 ACS on STN
RN 157702-06-2 REGISTRY
ED Entered STN: 16 Sep 1994
CN Glycine, N-[N-[3-[4-[3-[[[1-(acetyloxy)ethoxy]carbonyl]amino]propyl]-2,5-dioxo-1-imidazolidinyl]benzoyl]-L-α-aspartyl]-L-2-phenyl-, dimethyl ester (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C32 H37 N5 O12
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.



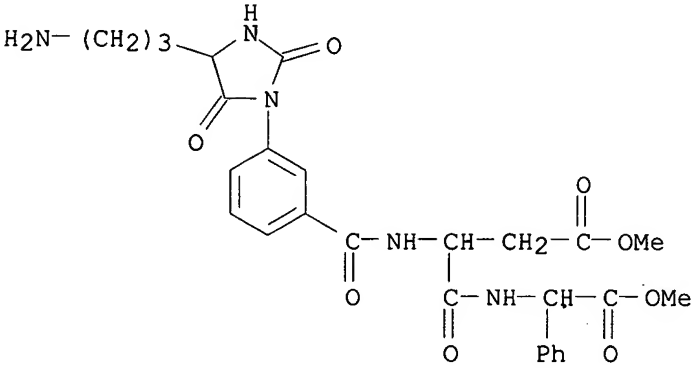
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 121:180236

L10 ANSWER 13 OF 18 REGISTRY COPYRIGHT 2005 ACS on STN
RN 157701-98-9 REGISTRY
ED Entered STN: 16 Sep 1994
CN Glycine, N-[N-[3-[4-(3-aminopropyl)-2,5-dioxo-1-imidazolidinyl]benzoyl]-L-α-aspartyl]-L-2-phenyl-, dimethyl ester, (S)- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE
MF C27 H31 N5 O8
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK



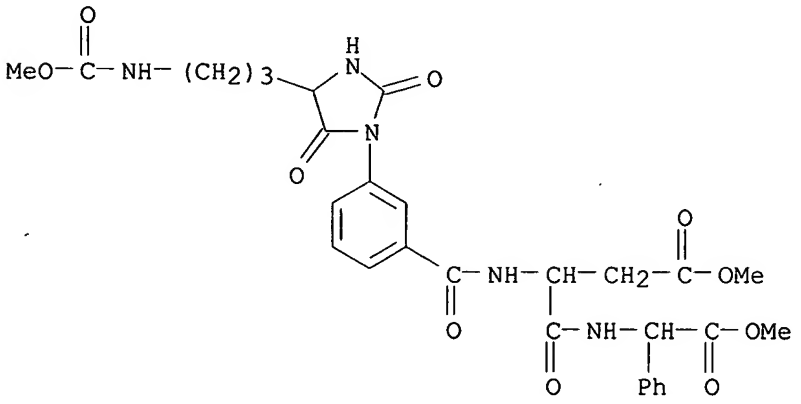
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 121:180236

L10 ANSWER 14 OF 18 REGISTRY COPYRIGHT 2005 ACS on STN
RN 157701-97-8 REGISTRY
ED Entered STN: 16 Sep 1994
CN Glycine, N-[N-[3-[4-[3-[(methoxycarbonyl)amino]propyl]-2,5-dioxo-1-imidazolidinyl]benzoyl]-L-α-aspartyl]-L-2-phenyl-, dimethyl ester, (S)- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE
MF C29 H33 N5 O10
SR CA
LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

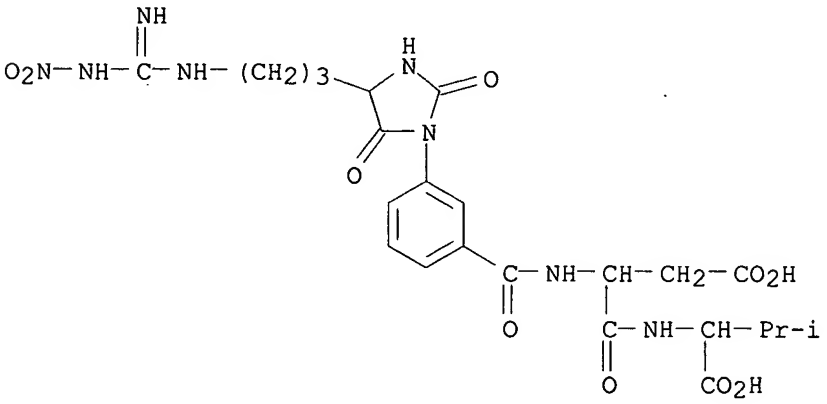


1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 121:180236

L10 ANSWER 15 OF 18 REGISTRY COPYRIGHT 2005 ACS on STN
RN 150376-47-9 REGISTRY
ED Entered STN: 01 Oct 1993
CN L-Valine, N-[N-[3-[4-[3-[[imino(nitroamino)methyl]amino]propyl]-2,5-dioxo-1-imidazolidinyl]benzoyl]-L-α-aspartyl]-, (S)- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE
MF C23 H30 N8 O10
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK



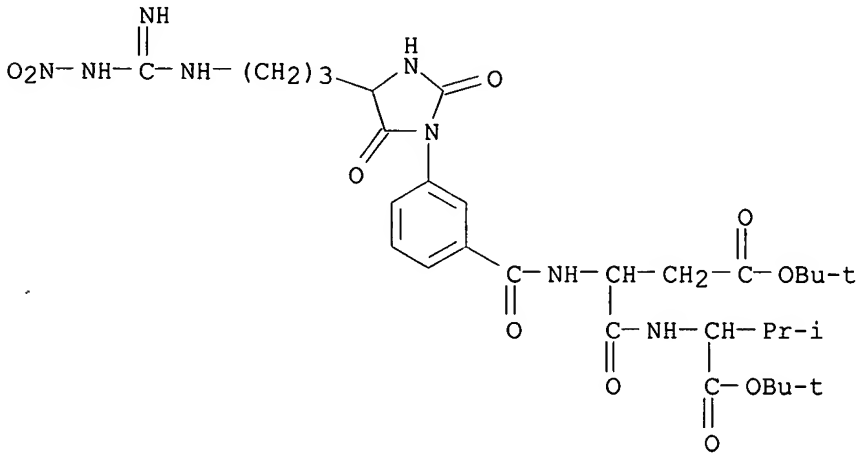
1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 119:181238

L10 ANSWER 16 OF 18 REGISTRY COPYRIGHT 2005 ACS on STN
RN 150376-46-8 REGISTRY
ED Entered STN: 01 Oct 1993
CN L-Valine, N-[N-[3-[4-[3-[[imino(nitroamino)methyl]amino]propyl]-2,5-dioxo-1-imidazolidinyl]benzoyl]-L-α-aspartyl]-, bis(1,1-dimethylethyl) ester, (S)- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE
MF C31 H46 N8 O10
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

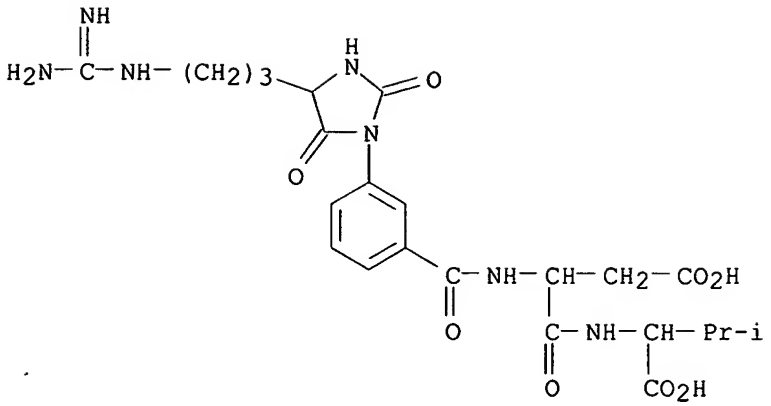


1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 119:181238

L10 ANSWER 17 OF 18 REGISTRY COPYRIGHT 2005 ACS on STN
RN 150376-11-7 REGISTRY
ED Entered STN: 01 Oct 1993
CN L-Valine, N-[N-[3-[4-[3-[(aminoiminomethyl)amino]propyl]-2,5-dioxo-1-imidazolidinyl]benzoyl]-L-α-aspartyl]-, (S)- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE
MF C23 H31 N7 O8
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

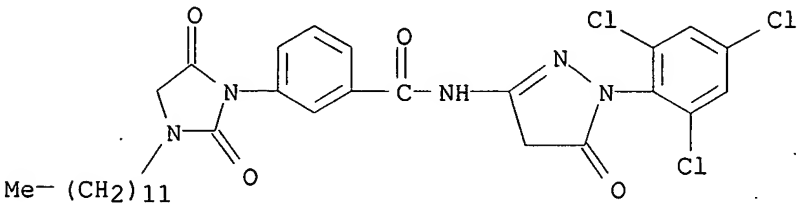
RELATED SEQUENCES AVAILABLE WITH SEQLINK



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 119:181238

L10 ANSWER 18 OF 18 REGISTRY COPYRIGHT 2005 ACS on STN
RN 75955-94-1 REGISTRY
ED Entered STN: 16 Nov 1984
CN Benzamide, N-[4,5-dihydro-5-oxo-1-(2,4,6-trichlorophenyl)-1H-pyrazol-3-yl]-3-(3-dodecyl-2,5-dioxo-1-imidazolidinyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C31 H36 Cl3 N5 O4
LC STN Files: CA, CAPLUS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 94:22896

=> d his

(FILE 'HOME' ENTERED AT 12:06:49 ON 31 OCT 2005)
SET COST OFF

FILE 'REGISTRY' ENTERED AT 12:06:54 ON 31 OCT 2005
L1 STR
L2 7 S L1
L3 124 S L1 FUL
SAV TEMP L3 SHIAO748/A

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L4              STR L1
L5            2 S L4 CSS SAM SUB=L3
L6           35 S L4 CSS FUL SUB=L3
                SAV L6 SHIAO748A/A TEMP
L7           17 S L6 AND 16.195.3/RID
L8           18 S L6 NOT L7
L9           17 S L8 NOT C31H36CL3N5O4
                SAV L9 SHIAO748B/A
L10          18 S L6 NOT L9

     FILE 'HCAOLD' ENTERED AT 12:14:27 ON 31 OCT 2005
L11           0 S L9
L12           0 S L10

     FILE 'HCAPLUS' ENTERED AT 12:14:38 ON 31 OCT 2005
L13           2 S L9
L14           6 S L10
                E DOMBROSKI M/AU
L15          40 S E3,E4,E9,E10
                E DUPLANTIER A/AU
L16          29 S E3-E6
                E SUBRAMANYAM C/AU
L17          73 S E3-E6,E8
L18           1 S L13 AND L15-L17
L19           0 S L14 AND L15-L17
L20           1 S L13 AND PFIZER?/PA,CS
L21           0 S L14 AND PFIZER?/PA,CS
L22           2 S L13,L18,L20
L23           6 S L14 NOT L22

     FILE 'USPATFULL, USPAT2' ENTERED AT 12:17:40 ON 31 OCT 2005
L24           1 S L9

     FILE 'REGISTRY' ENTERED AT 12:18:09 ON 31 OCT 2005

     FILE 'USPATFULL, USPAT2' ENTERED AT 12:18:27 ON 31 OCT 2005

     FILE 'HCAPLUS' ENTERED AT 12:18:43 ON 31 OCT 2005

     FILE 'REGISTRY' ENTERED AT 12:21:40 ON 31 OCT 2005

=>
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